JPRS 79683

17 December 1981

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 193

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EXPANSION OF POSTS AND TELECOMMUNICATIONS NETWORK OVER PAST 5 YEARS

Hanoi NHAN DAN in Vietnamese 20 Oct 81 p 2

[Article by Nguyen Doan, Posts and Telecommunication General Department: "Posts and Telecommunications Network Expands"]

[Excerpts] Over the past 5 years (1976-1980) the long-distance and provincial telecommunications network has increased by 5,904 km of pole line with 37,950 km of wire pairs of various kinds, 740 km of narrow-band relay radio wire; 215 districts have been equipped with carrier terminals thus injuring communications from the central echelon to provinces, municipalities and special zones by wire, short-wave radio transmission and radio relay, including wired linkage from 34 provinces and municipalities to the central echelon. Over the past 5 years the district, city and town networks have been increased by 500 telephone exchanges of various kinds and 27,000 individual [telephone] sets. At present, there are nationwide 3,968 telephone exchanges and 90,254 telephone sets, including 291 automatic exchanges with 44,620 telephone sets. An automatic telephone network covers 28 provinces and cities, while 1,200 villages and cooperatives now have telephones. To achieve the goal of unifying the communications network nationwide, since 1977 the sector has concentrated capital, supplies and labor on building the 2,080 km-long open wire Hanoi-Ho Chi Minh-City-Minh Hai line. The first part of the project has now been completed and put into gradual use so as to promote efficiency of invested capital. Many southern provinces and districts have used this line to communicate directly with the central echelon via the wired system.

Within the framework of a gradual network modernization program, for the first time the posts and telecommunication sector has built and put into commission a 110 km-long distance communication copper coaxial line connecting Hanoi, Hai Duong and Haiphong, capable of transmitting 3,596 khz or 360 conversions. Along with building the coaxial cable, the posts and telecommunication sector has assembled and installed telephone carrier terminals for use with the cable, capable of accommodating 360 phone channels on the longest communication distance of 2,500 km as well as demodulation anywhere along the line with the use of special equipment. The completion and putting into use of the ground station of the Lotus communication satellite has changed the quality of communications between our country and other nations in the world, opening up many new capabilities to international communications. Because the communications network is well-focused and has strengthened, improved and developed in the right

direction, over the past 5 years although the labor force of the entire sector has increased by 11 percent, labor productivity has increased by 119.7 percent, and the sector's capacity to serve has increased noticeably. In comparison with 1976, the volume of postal matters and packages in 1980 has increased by 42.1 percent, telegraph has increased by 90 percent, long-distance telephone has increased by 98.4 percent, satisfying many communication and liaison requirements of society and individuals. Owing to increased capacity of serving, the aggregate income of the sector has increased by 144 percent. For 5 consecutive years, the sector has overfulfilled state plans.

To carry out more properly the current task, the postal and communications network still has to overcome many shortcomings and weak points, striving to raise the capacity of serving, ensuring quality, stabilizing the network and maximize the use of communications equipment.

9213
CSO: 5500/4511

POST-TELEGRAPH SECTOR PREPARES FOR PARTY CONGRESS

Hanoi QUAN DOI NHAN DAN in Vietnamese 30 Oct 81 p 1

[Text] VNA--The main information centers of the post and telegraph sector have launched a collective emulation movement to urgently complete many liaison works and to strengthen the post and telegraph service and domestic publications distribution network in order to serve the party congress and the people.

The post and telegraph centers in the cities of Hanoi, Ho Chi Minh, Haiphong and Da Nang have set forth specific measures aimed at ensuring the safe, exact and timely reception, conveyance and distribution of official documents and other materials for the benefit of the party congress. The various installations are trying to quickly complete works connected with 800-number automatic telephone devices, and with the Noi Bai-Hanoi microwave signal line, to open two short-wave wireless telephonic channels between Hanoi and Ho Chi Minh City and to install and operate an information network between Ho Chi Minh City and Moscow--all that with the objective of maintaining thorough telephonic and telegraphic liaison between the principal information centers.

At the central level, the publications distribution center and the letters and newspapers dispatch center are improving their working method, rearranging working shifts, increasing the number of operational vehicles and trying to avoid mistakes and losses and to finish the task of packing and distributing daily newspapers an hour ahead of schedule, weeklies 6 hours after their receipt and magazines within the day of their receipt in order to bring them into the people's hands as soon as possible.

The sector is also trying to avoid the loss and stagnation of mail items and letters of the people, especially the letters and applications addressed by them to party organs. On this occasion, the telegraphic, telephonic, and postal centers have also launched an activity campaign aimed at enchancing the spirit of wholehearted and courteous service to customers.

9332
CSO: 5500/4517

SATELLITE COMMUNICATIONS DISCUSSED AT SEMINAR

Santiago EL MERCURIO in Spanish 5 Nov 81 p C7

[Text] A complete report on the state of telecommunications in Chile was given by Lt Col Gerson Echeverria, undersecretary of the ministry, at the seminar on the topic organized by the National Telecommunications Enterprise, ENTEL-Chile, at the FISA [Santiago Industrial Fair] Center of Congresses.

Also participating in the event, which is one of the activities scheduled by ENTEL in its Cerrillos Park presentation, was the general manager of the communications organization, Col Jaime Machuca, the chairman of the ENTEL directorate, Maj Gen Luis Joaquin Ramirez, and the manager of international relations of the satellite communications system, INTELSAT, Jose Luis Alegret, of Venezuelan nationality, who came to Chile for the specific purpose of attending the seminar.

Among those present were engineers and technicians from public and private enterprises involved in communications.

Pioneer

The undersecretary of telecommunications said in his report that the sector is in a phase of development and growth of great importance. He reminded those present that Chile was the first country in South America to join the satellite communications system.

"Our country was also the pioneer in domestic use of the system, with the installation of telephone communications between Punta Arenas and Santiago."

He reported that it will soon be possible to have the same process in telephone communications between Santiago and Coihaique, in the 11th region. Echeverria then emphasized the work done by the Office of Undersecretary in coordinating and supervising telecommunications.

When asked about the new law that will regulate this activity, Echeverria said that it was hoped that it would be promulgated in December and that it is now being approved by Legislative Committee 4.

"This is a broad and flexible legal code," he said, "that will provide real substance for and promote the development of telecommunications, in keeping with the growth of our economy."

He explained that the law on telecommunications will replace the old regulation on electrical services, but that its promulgation will not alter already existing provisions.

Possibilities

For his part, the manager of international relations of INTELSAT, Jose Luis Alegret, emphasized in his report the interest now aroused by utilization of the satellite for communications by various countries.

He then pointed out guarantees offered by the system, mainly for internal communications and the transmission of data in countries where the topography presents insurmountable obstacles.

Alegret finally spoke of the wide range of possibilities offered by satellite communications, possibilities that have not yet been used.

12,464
CSO: 3100/1044

SANDINISTA-MARXIST RADIO BROADCASTS OVERPOWER LOCAL STATIONS

San Jose LA NACION in Spanish 28 Oct 91 p 6C

[Article by correspondent Edgar Vega]

[Text] La Cruz, Guanacaste--Nicaraguan radio stations are heard more than 50 kilometers into Costa Rica and cover the entire border area, residents there have stated.

It was reported that Nicaraguan radio broadcasts reach from Liberia on the Pacific coast to Barra del Colorado.

The residents explained that Radio Sandino and Radio Ferore Sur, located in San Carlos, as well as television channels 2 and 6, are bombarding Costa Ricans in the border region with Marxist-Leninist slogans.

"They are simply unbearable," they asserted.

They also said that they have great difficulty tuning in the Armenti electronic media in the area. Only Radio Monumental, Radio Columbia and Channel 13 are readily received.

"Whether they like it or not, the residents of northern Costa Rica are forced to listen to Sandinist radio and watch Sandinist television, because of how strongly they come in, and thus little by little Costa Ricans are being brainwashed by communist policy as transmitted by the Sandinist Government," they stated.

They also explained that being exposed to Marxist ideology is more detrimental to young people and children than to adults.

In addition, they mentioned that some 8 months ago, Planning Minister Olivier Jimenez met with members of the La Cruz City Government to discuss the problem.

On that occasion they came to the conclusion that El Mora Hill, in the foothills of the Orosi volcano, is the best site for a powerful relay station for Costa Rican radio and television.

Since then, nothing has beer heard about the matter, although channel 13 recently ordered efforts made to counteract the Nicaraguan media penetration, it was reported.

In conclusion, the residents of the region stated that now that the leaders of Nicaragua's government have announced their political and ideological line, which is openly Marxist-Leninist, the Costa Rican Government and the democratic forces must combat this invasion.

8743
CSO: 5500/2050

CHABBAHAR MICROWAVE SYSTEM TO BE REPLACED

Tehran KAYHAN INTERNATIONAL in English 12 Nov 81 p 1

[Text]

TELECOMMUNICATIONS
COMPANY OF IRAN

TENDER
Dr. Ali Shariati Ave., Bldg. No. 5
Tender Notice No. 60/62

The Telecommunication Company of Iran (TCI) located at Dr. Ali Shariati Ave., Bldg. No. 5 invites Tenderers to take part in Replacing the existing 1+1 Microwave system of Padag-Chahbahar route by a new two-way 12x1 FDM channel 2+1 system consisting of one TP, one TV and one protection channel herein after called "High Density Route" and also to replace the existing UHF and VHF system of Iranshahr and Saravan by new XII FDM channel 1+1 Microwave radio systems in the new routes (Herein after called "Low Density routes").

The Contractor shall supply all the equipment on basis of C&F delivery to Tehran in accordance with attached Technical Specifications, Draft Contract and tender conditions.

Prospective applicants should pay Rls. 10,000 (documents fee) to the account No. 90018 of Bank Melli Iran Mokhaberat Branch, and receive the tender documents which consist of tender conditions Draft contract, and Technical Specifications, sign them and attach them to their offer in 3 sealed envelopes marked A,B,C and hand it to the General Secretariate Department of Purchasing and Contract of T.C.I. second floor room 209 at the said address against a receipt.

Applicants residing abroad are exempt from paying Rls. 10,000/- fee in the case of having no agency in Iran. The tender documents will be mailed to the address of such applicants.

Tenders received not later than the end of office hours on Monday, Jan. 18, 1982 (28.10.1360) will be opened by the tender committee at 10.00 O'clock on Jan 19, 1982 (29.10.1360) in room No. 208, at above address.

Tenderers or their authorized representatives holding a letter of introduction, may attend the tender committee.

Telecommunication Company of Iran is entitled to reject any or all the bids received./H

Purchasing and Contracts Division
of TCI

Cables: Irtelco
Intertel Tehran

Telex: 2799 TCI TN MA-22172

BRIEFS

BAGH-E MALEK BOOSTER READY--Last night the 10-kilowatt television transmitter of Bagh-e Malek went into operation. It will telecast the programs of network number one of the Vision of Iran on Channel 6 and will be seen by Bagh-e Malek and the surrounding areas. [GF301711 Ahvaz Domestic Service in Persian 1330 GMT 30 Nov 81 GF]

CSO: 5600/5311

BRIEFS

COMPLETION OF COMMUNICATIONS PROJECTS--The Public Post, Telegraph and Telephone Organization completed a number of important projects in the first 6 months of the current year. A source in the ministry [of communications] has said that these projects include the telex, telegraph and electronic teleprinter equipment and their attachments, the national microwave [project] equipment, reorganization [presumably meaning updating] of the equipment in al-Salihiyah studio and linking Iraq with Kuwait by microwave. A total of 17 automatic telephone exchanges were also installed in various parts of the country, the international communication exchange has been expanded to maximum capacity and the ground station has been expanded and new channels added to it. A new carrier has been added to the Indian Ocean antenna of the ground station. Telex equipment has also been added to this station. Al-Hillah site and the electronic computer project for mechanization [computerization] of the telephone lists [directories] have also been brought under control. At the same level, the Pivotal Cables Authority completed a number of important projects in the same period, including the provision and installation of the equipment and the cables for the southern pivotal cable project and extension of the pivotal cable to the Upper Euphrates. A communications complex was built in (Dawsar Tun) and another in Dahuk. A grounding [tanzil] station was built in Irbil, communication complexes were built in Ashi Kalak and Bartila and telephone exchanges were built in al-Mashidiyah and al-Fallujah. [Text] [Baghdad AL-THAWRAH in Arabic 7 Sep 81 p 6] 8494

CSO: 4500/4703

ISSUES, PROBLEMS CONFRONTING COMMUNICATIONS MINISTRY DISCUSSED

Kuwait AL-TALI'AH in Arabic No 711, 23 Sep 81 pp 16-17

[Article: "Ministry of Communications Between Development Tendencies and Current Stumbling Blocks"]

[Text] In the past few days, the interviews and statements by officials of the Ministry of Communications have raised a number of important issues pertaining to the development of this ministry's services. While the officials were talking about their future plans, the citizens have been voicing their complaints over the deteriorating services of the Ministry of Communications, especially complaints over the problems connected with the telephone service.

One of the most significant interviews given last week was the interview by 'Isa al-Muzyidi, the minister of communications. In his interview with AL-WATAN on 9 September, the minister dealt with a number of significant issues about which we think it is important to discuss in this article.

In his reply to a question on the importance of the explanation form issued by the ministry, the minister said: "These forms have been issued due to the delay in the delivery of some bills to subscribers enjoying the telephone service."

It is also evident that the goal of these forms is to enable the ministry to collect the overdue fees and subscriptions owed by the citizens. Though we understand the importance of this step and the importance of having the citizens pay the dues in return for the telephone service, we still believe that there is another problem which has been discussed by the press. The citizens' letters and complaints are connected with the fact that the ministry has overbilled some citizens who have not actually used the service to the degree meriting the payment of such sums. Moreover, the failure to examine the bills have caused some citizens to shoulder the dues owed by others.

Though we agree with the minister over the ministry's eagerness to collect its dues from the citizens, the citizens also deserve to have their rights respected by the ministry and deserve not to be saddled with burdens beyond their capability. The special forms would seek to realize this goal.

On another question concerning the troubled and dead lines and the frequent complaints over this issue, the minister said: "This is due to the age of some

[illegible] to the carelessness of others to weather conditions, such as rain and [illegible] elsewhere. It is also largely due to civilian works, such as excavation and road works."

The truth is that some of the reasons that the minister has mentioned are objective while others fail to provide an adequate answer. The minister talks, for example, of coordination among the various service utilities controlled by state agencies. Such coordination presumes, at least, cancellation of the major reasons given by the minister, namely excavation and other works carried out by the state's various agencies. It is either that there is not coordination or this is not the major cause.

The most important point in the minister's interview is connected with the problem of external calls. In his reply to a question on this issue, the minister confirms the presence of a problem in this section but defines causes that do not agree with the causes previously underlined by Engineer Ibrahim al-'Askar, the director of the Telegraph and Telephone Department.

Al'Askar had defined the essence of the problem in the shortage of workers in this section. In a statement to AL-WATAN on 6 September, al-'Askar said that there are in the section 120 switchboards that are supposed to be manned by 480 workers alternately whereas the section only has 130 workers. Engineer al'Askar also said that he has asked the ministry's agencies concerned to appoint 150 additional employees to improve the service in this vital section.

But the minister ignores the problem in his interview and cites a number of reasons beyond the control of the officials and connected with the cooperation of other countries. When mentioning matters concerning the section, the minister asserts that the section is in good condition, saying: "After the surprise visits I have made to the section, sometimes in the late hours of the night or the early hours of the morning, I have found those working in the international communications performing their duty with dedication and sincerity, especially since they have felt the strong interest of the ministry's officials."

There is no doubt that this section's workers perform their work well. But can they perform their duties in the best manner possible under the shortage which the section is experiencing and which has been underlined by the department's director?

Moreover, the minister said in the interview: "Due to the increasing number of those wishing to call various parts of the world, there is increased pressure on the lines and this makes one feel that they are busy all the time."

Here the minister circumvents the real problem pointed out by Engineer al-'Askar by saying that the lines are constantly busy.

Where is the truth here? Is it the shortage of workers or the shortage of lines? We don't know. But at least there must be accord and agreement among the ministry officials in defining the real reason so that we may at least have the hope that the problems experienced by this vital service in the country will be eliminated.

The minister also pointed out in the interview that the ministry has invited new bids for the construction of a network of an exchange with a capacity of 25,000 lines, which can be later expanded to 100,000 lines, for car telephones or portable telephones.

Before the minister's interview, there was a statement by a ministry official about a plan to provide television service by telephone. We would like to ask a question that has caused excitement among the citizens: Has the ministry solved the dilemma of the telephone service and eliminated its problems in order to begin thinking of luxury services? The citizens are waiting for current to be injected into their dead lines, for the queue lines to be unsnarled and for the telephone service to be provided to new areas and to some old areas. We must point out that al-Shu'aybah area lacks even a single telephone line. Shouldn't the attention be focused on these vital aspects before thought is given to inviting bids for projects for car telephones and cable television services.

Finally, answering Al-WATAN's question on whether the ministry has a plan to provide telephone service to new areas, the minister says: "Naturally, the ministry proceeds according to a timetable to provide the various services, especially telephone service, to new residential areas or to areas that will be developed in the future." But the minister makes the plan so general that you almost feel that it is nonexistent. Answering a question requesting that he define the first area that will enjoy such services, the minister says: "The truth is that there is no specific area. The programs have been formulated for the various areas of Kuwait according to priority and according to the construction projects which will be carried out in them."

This answer raises a number of questions. Why is it difficult to determine the area? Where does this difficulty come from if there is a timetable and why has the minister's answer in this regard been vague?

Moreover, the minister's statements regarding overcrowding in the Kuwait ports is also debatable. The minister denies that there is overcrowding in the ports, saying: "On the contrary, Kuwait port is one of the international ports lauded by the various countries exporting goods to this area. We experience no pileups in the Kuwait ports and their work is proceeding very smoothly."

We would like to remind the minister that a short while ago the crisis of Kuwait port was discussed on the pages of one of the other newspapers. As far as we remember, a committee was formed at the time to discuss this issue.

In conclusion, we would like to emphasize that defining the problem and not trying to unravel it are fundamental factors in finding the proper solution for it. Therefore, the ambiguity regarding some points in the minister's interview needs to be dispelled and clarified so that rumors and hearsay may not be the basis for discussing problems and defining their causes. Telling the citizens the facts, revealing matters to them and asking them to participate in and to contribute in finding solutions to the problems affecting them constitutes a basic step in creating the foundations of development and reconstruction. What really concerns the citizens are solutions to their daily problems and not talk about the introduction of luxury services which are not the people need.

9439
CSO: 4802/107

BRIEFS

'PANA' CONVENTION RATIFIED--Addis Ababa, 26 Nov (AFP)--Burundi today became the 15th Organisation of African Unity (OAU) member state to sign the convention establishing the PAN AFRICAN NEWS AGENCY (PANA). Burundi Ambassador Artemon Simbananiye signed the document in the presence of visiting PANA Director-General Ousmane Diallo, whose headquarters is based in Dakar, Senegal. Mr Simbananiye affirmed his country's active support for Africa's efforts to promote a new world information order, while Mr Diallo said the OAU body would be a weapon in Africa's bid to achieve unity and genuine independence. One-third of the 50 OAU member-states must sign the convention for it to go into force. Although 15 have signed so far, a total of 24 member states have paid their financial contributions to PANA, expected to go into operation next year. [Text] [AB261234 Paris AFP in English 1737 GMT 26 Nov 81]

CSO: 1500/3615

BRIEFS

JAPANESE TELECOMMUNICATIONS ASSISTANCE--The Japanese Government is to grant Ghana a loan of (5.9 billion yen) about £72 million for the expansion and modernization of the country's telecommunication system. This will bring to over six billion yen the total loan so far granted to the Government of Ghana by the Government of Japan this month. According to a Ghana News Agency report, the Japanese Ambassador in Ghana, Mr Masatada Higaki, disclosed this yesterday when he paid a courtesy call on the Minister of Finance and Economic Planning, Professor George Benneh. The report said Prof. Benneh expressed the Ghana Government's appreciation to the Japanese Parliamentary Vice Minister for Foreign Affairs for securing the loan for Ghana. Prof Benneh stated that the loan would enable Ghana to link her telecommunication system with other member countries of the Economic Community of West African States (ECOWAS). The loan which carries an interest rate of 3.5% is payable in 30 years with a ten-year grace period. Last Friday, the Japanese Government gave Ghana 400 million yen for the purchase of fertilizer, chemicals, machinery and services to boost the country's agriculture. Three hundred million yen out of the total amount will be utilized for agricultural development projects in Upper and Volta Regions. The remaining 100 million yen will go to the Okyereko Irrigation Project in the Central Region. [Text] [Accra DAILY GRAPHIC in English 13 Nov 81 p 8]

CSO: 5300/5038

BRIEFS

COMMERCIAL TELEVISION CENTRALIZATION--The Presidential Adviser on Information, Chief Olu Adebanjo, has announced that commercial services of the Nigerian Television Authority (NTA) would henceforth be centralised. Chief Adebanjo made the announcement while launching the first Nigerian Television National Audience Research and Marketing Audit in Lagos. He said the centralisation of NTA's commercial functions had become necessary because of the need to overcome the usual problem of communication which had already made it difficult for customers to reach the distant stations of NTA. Under the new plan, Chief Adebanjo said the country has been divided into six areas with a number of area controllers and area representatives to satisfy the needs of the customers. [Text] [London WEST AFRICA in English No 3345, 7 Sep 81 pp 2073-2074]

'RADIO NIGERIA,' IKEJA, ESTABLISHED--The presidential adviser on information, Chief Olu Adebanjo, has said that the establishment of Radio Directs, Ikeja, is aimed at correcting the falsehoods being broadcast by Radio Lagos. He told newsmen at Murtala Muhammad Airport yesterday that the Lagos State Government had never cooperated with the federal government but was only spreading malicious rumors against it. This, he noted, did not make for democracy nor did it augur well for the people. Chief Adebanjo stated that the present administration had never censored any government-owned media organization as being rumored in some quarters. He condemned the journalists who allow themselves to be used as tools by some unscrupulous politicians to achieve their selfish goals. The presidential adviser was on his way to Port Harcourt to begin an official visit to the Rivers and Cross River States. [Text] [AB240900 Lagos Domestic Service in English 0600 GMT 24 Sep 81]

JOHANNESBURG FIRM MANUFACTURES THICK-FILM HYBRID

Johannesburg THE STAR in English 18 Nov 91 p 20

[Text]

MSN Products, a member of the quoted Altech Group, announces development of a new manufacturing hybrid thick film circuit manufacturing technique.

MSN, manufacturer of hybrid thick film microelectronics, has spent several months in the development of the new method of embedding components at multi-layering substrates in order to cope with latest microprocessor requirements.

Peter Wilson, managing director of MSN, said: "Products [illegible] have already been manufactured using MSN's Johannesburg facility and delivered to a leading automated electronics systems producer. This rugged computer is a user-friendly multiprocessor controller using semi-packaged devices and has already [illegible] over other technologies. The semi-packaged integrated circuits and chip elements used require sophisticated packaging and interconnection techniques."

Mr Wilson said the semi-packaged [illegible] multilayer manufacturing methods utilising gold cracking and overbonding techniques have always proved highly expensive [illegible]

CSO: 3500/M36

FIRST ACHIEVES BREAKTHROUGH ON DIGITAL PABX'S

Johannesburg SUNDAY TIMES-HISTORICAL TIMES in English 15 Nov 81 p 34

[Text]

PLESSEY, the Cape-based electronics and telecommunications group, has begun manufacture of its first digital PABXs.

Development of the R1,5-million project coincides with the Post Office's recent installation of its first digital electronic telephone exchanges.

By offering PABX users complementary advanced digital electronic technology, Plessey will enable the new equipment's full potential range of services and facilities to be realised.

A unique aspect of Plessey's system, the R2 PEDIS, is that it is South African-designed.

Rather than modify existing overseas designs to meet the South African Post Office specifications — the route chosen by other suppliers — it was decided to participate in a new design from conception.

A team of four highly qualified South African engineers were seconded to Plessey Canada where the new Digital PABX design project was initiated.

These engineers were assigned and built a South African prototype model incorporating South African specifications for lightning, humidity, high temperatures and telephone network characteristics.

This approach has paid off through the skills the team acquired and contributed to the project and the subsequent speedy acceptance subject to satisfactory field trials of the system by the Post Office.

The systems to manufacture have will be placed on field trials during which they will be subjected to the normal operating conditions which all PABXs experience.

Once these are completed, deliveries to customers are scheduled to commence in the second quarter of 1982. Initial orders have already been taken by Plessey's communications systems division.

The range of services and facilities of the R2 PEDIS include a memory to store numbers, allowing abbreviated or automatic dialling, a "follow me" function for rerouting calls to different offices when the recipient leaves his office, conference facilities and various levels of trunk barring.

The system is also fully extensible from 2 to 2 000 extensions, allowing businesses to expand their telephone systems without physically changing to larger units.

An important consideration with many office rents is that the system is also a space saver — a 120-extension system occupying only 1,2 sq. m of floor area.

CSO: 3400/1014

SOUTH AFRICA

BRITISH COMPUTER [illegible]

Johannesburg SUNDAY [illegible]

[Article by John Spira: "UK Computer Deal [illegible]"]

[Text]

CMC, Britain's largest manufacturer and distributor of computer data capture equipment, is to establish a permanent presence in South Africa.

The move is part of the [illegible] group's drive [illegible] world markets.

CMC has underlined its commitment to the South African market by mounting a large [illegible] exercise in Sandton [illegible] people taken over from the company which has [illegible] ing CMC [illegible] in the country.

Jeremy Cassidy, managing director of CMC (UK), told Business Times that the group's decision to establish [illegible] South Africa was taken with the full confidence that CMC [illegible] ment will make major inroads into a [illegible] market [illegible] of a [illegible] economy.

He said that to promote CMC sales in South Africa and in the region of [illegible] a number

The target is to double the figure to early [illegible] CMC's range of data capture and [illegible] respectively, [illegible] the micro, which [illegible] [illegible] which [illegible] data [illegible] [illegible] processing, [illegible] and [illegible] processing.

"In fact," said Mr Cassidy, the Sovereign's flexibility and power [illegible] enable [illegible] [illegible] users to [illegible] their [illegible] and [illegible] [illegible] with [illegible] [illegible] Sovereign.

He added that CMC [illegible] ing in the [illegible] and [illegible] through a [illegible] in South Africa. Australia has an [illegible] base [illegible] it has 28 [illegible] already [illegible] in South Africa.

"We have found on the [illegible] and other [illegible] [illegible] trade are receptive to [illegible] a [illegible] stock in South Africa [illegible] to the [illegible] we have in the UK."

CMC's UK [illegible] in the data entry [illegible] market is [illegible] applied [illegible] in South Africa.

Martin Jones, managing director of the new [illegible] company, [illegible] the existing [illegible] systems in South Africa will require [illegible] [illegible] [illegible] [illegible] of software and [illegible] [illegible] [illegible] [illegible] with the [illegible].

At present, CMC exports [illegible] of its turnover, but it [illegible] an aggressive drive [illegible] [illegible] this figure to [illegible] [illegible] the next two years to [illegible] [illegible] as it [illegible].

More than one [illegible] CMC has been [illegible] in the UK, according to Mr Cassidy. CMC [illegible] of [illegible] have been [illegible] [illegible] at [illegible] a year in some of the [illegible] markets.

Worldwide sales are [illegible] to reach [illegible] [illegible] by the mid-1980s.

CMC forms part of a [illegible] conglomerate which [illegible] a turnover of [illegible] [illegible] [illegible].

CSO: 3400/1634

NEW SISWATI RADIO SERVICE PLANNED

Mbabane THE TIMES OF SWAZILAND in English 19 Nov 81 p 1

[Article by James Dlamini]

[Text] Swaziland may soon have a new commercial Siswati radio service.

Swazi Music Radio, which broadcasts from Swaziland into South Africa in English, Portuguese and various Indian languages, is planning to expand into the local market.

The station, which started in 1972, operates from Sandlane near the border with South Africa.

It is understood the company, which faces fairly stiff competition from other radio stations in South Africa, feels there is a gap they can fill in the local market.

Kirsh Holdings, who own the station, are presently trying to get the government "green light" for the new service.

Company director, Mr. Issi Kirsh, said he could not say how much money would be spent on the project until discussions and engineering statistics had been submitted.

"But I can tell you, development projects like this are not cheap," he said. "I cannot comment any further until discussions with the government have been finalised."

Mr. Kirsh is the brother of tycoon, Natie Kirsh, who has a number of businesses in Swaziland and is chairman of Kirsh Holdings.

A top government official disclosed that Kirsh have approached Swaziland Broadcasting and Information Department with proposals.

"They have approached us because they need our permission to go ahead with a project like this," the official said. "They are trying to improve their FM coverage to reach Swazi audiences. They also want to improve their medium wave to broadcast into Kwa-Zulu from Swaziland," the official said.

Meanwhile, a new radio station aimed at South African Swazis in the ka-Ngwane homeland is being planned. The ka-Ngwane Radio will broadcast from the town of Nelspruit. There will be 12-hour broadcasts.

Swaziland Broadcasting Service recently introduced a new and improved network which reaches about 90 per cent of the country.

CSO: 5500/5639

PROGRESS AND PLANS FOR COMMUNICATIONS SERVICES DEVELOPMENT REVIEWED

Moscow EKONOMICHESKAYA GAZETA in Russian No 37, Sep 81 p 2

[Article: "Communications Development. Review"]

[Text] The utmost development of communications is one of the prerequisites for the further strengthening of our economy and the steadfast rise in the material and cultural standard of living of the Soviet People. Considerable progress was made in the past five-year plan in improving communications facilities. A half-billion more rubles were invested in the sector than was called for in the plan for 1976-1980. Fixed production capital grew by 43 percent. Communications workers carried out the assignments of the 10th Five-Year Plan ahead of schedule. Their labor received a high rating in the welcoming speech of comrade L.I. Brezhnev.

Long distance telephone lines, the basis for the nation's electrical communications system, expanded at a fast pace over the past period. The length of channels using modern cable, radio relay and satellite links increased by a factor of 1.9. The network of automated long distance telephone exchanges doubled. Now the residents of 137 cities enjoy direct long distance dialing. More than 70 percent of the regional centers have automated service to the oblast centers.

The five-year plan to increase telephones in the cities and rural areas has been overfulfilled. In all, about six million subscribers have been added. The farm telephone service at 15,000 kolkhozes and sovkhozes was expanded and rebuilt at the same time. The task of doubling the number of facsimile telegraph stations for newspaper type pages in the 10th Five-Year Plan was fulfilled a year ahead of schedule. Now, the type pages for 13 central newspapers are transmitted from Moscow via communications channels to 41 stations in the nation. The capacity of channel switching centers for the statewide data transmission system and telegraph network increased by a factor 1.7.

The assignment in the five-year plan to place television stations in service was significantly overfulfilled. As a result, television broadcasting now covers the territory of the USSR where 96 percent of the populace lives. All of the existing network allows the transmission of color television programs. The material and technical base for postal service has been strengthened. Labor productivity of communications workers has improved by 26 percent over the five years.

Based on Advanced Equipment

Ahead in the 11th Five-Year Plan, in accordance with the resolutions of the 26th CPSU Congress is the more complete satisfaction of the needs of the national economy and the populace for communications services.

Considerable capital investments are being routed to the further development and improvement of long distance service. The length of long distance telephone channels will increase by a factor of about 1.8 times. The fast pace of television development as well as the municipal and rural telephone networks is being maintained.

The acceleration of scientific and technical progress throughout the entire extensive sector economy is a decisive factor in the continuing formation of the nation's unified automated communications network (YeASS). The primary issue is the automation of the networks. While more than a billion telephone calls are made annually at the present time in all, by 1985, it is anticipated that the number of them will increase to approximately 2.1 billion. It is necessary to do a great deal of work in rebuilding and supplementally multiplexing cable and radio relay links.

The level of automation on the long distance network will rise approximately by a factor of 3.5. This will be achieved through the installation of new crossbar and quasi-electronic exchanges, designed for receiving a larger trunk group of communications channels. The line-of-sight "Kurs-4" and "Kurs-6" radio relay links will find widescale use along with cable lines.

With all of the obvious shifts in the development of long distance service, there remain serious short-comings nonetheless. Placing the planned capacity of new cable trunks in service is frequently delayed. High capacity radio relay links are often capable of transmitting only television programs after being placed in service, while completing their equipment for telephone conversations is put off for several years.

This is not the only reserve for more completely meeting the needs for long distance communications facilities. Because of all kinds of defects on the lines, equipment breakdowns at telephone channel exchanges, only 15 to 20 minutes per hour are used in many cases for subscriber conversations. The main administration for line, cable and radio relay facilities (the chief is comrade Tyulyayev) of the USSR Communications Ministry and the oblast production engineering administrations are called upon to give more concern to more efficient operations of the expensive trunks.

In the current five-year plan, the number of telephone in cities and rural areas should increase by a factor of 1.3, including an increase of 1.4 times in the number of telephones installed among the population. The scales of retrofitting and expanding the networks are increasing for this purpose.

An extremely important trend in technical progress in the field of transmission systems is the design of fiber optics communications lines. Experimental fiber

optic lines have already been constructed on several main [illegible] networks. It is planned that [illegible] models of optical cable will be introduced in the current five-year plan. But most switching equipment components in [illegible] networks as distribution frames, power and distribution lines still remain [illegible] and require a high metal input.

It is planned that the capacity of municipal and rural telephone [illegible] will increase in the present year by 1,150,000 numbers. To accomplish [illegible] this task program, it is necessary to step up the construction of [illegible] changes and putting in the networks in regions of mass residential [illegible].

New Developments in Television and Radio Broadcasting

The expansion of television and radio broadcasting is envisaged [illegible] the current five-year plan. There are now more than 100,000 kilometers of radio relay channels, about 1,500 "Orbita" ground stations are to [illegible] as well as up to 90 "Orbita" stations, and more than 30 stations of the new "Ekran" satellite television broadcasting system. Based on the comprehensive utilization of ground and satellite links, a transition has been made to five coverage zones for television broadcasting (according to time zones) for the first central television program, and beginning in 1981, the transition was made to three coverage zones broadcasting of the second program. Color television centered with the complete quality is now provided in the majority of the populated areas of the Soviet Union.

New high power television transmitting stations and low power repeaters are being built in the current five-year plan, including those with [illegible] connection via the "Ekran" and "Moskva" satellite system. The goal is to [illegible] television broadcast coverage of the nation's territory where 90 to 95 percent of the population lives with the first program and make it available for 75 to 77 percent of the populace to receive two programs. There will be a substantial expansion of the reception zones for local television broadcasting, primarily [illegible] level broadcasting.

The assignments for sufficient radio broadcasting [illegible] fully carried out, including the broadcasting [illegible] long-wave, medium wave, short-wave and UT radio broadcasting stations to be more diversified and [illegible] more powerful. In the Urals [illegible] broadcasting has nine program channels at the present time. [illegible] obtain broadcasting [illegible] nearly half of the national languages of [illegible].

In the current [illegible] programs will [illegible] retransmitting of television radio-broadcasting will be [illegible] heard in 17 cities. Two [illegible] 1981.

The wire broadcasting network [illegible] The major trend here is [illegible]

broadcasting system. There are 40 million radio repeater stations at the present time, to the plug outlets of which three programs are fed. During 1981-1985, it is planned that the number of such points will increase by no less than 20 percent. Unfortunately, the capabilities of radio repeater networks are not being fully utilized; there are not enough three program loudspeakers. Not enough of them are being produced by the plants of the Ministry of the Communications Equipment Industry.

It is quite important to continue the automation of numerous rural radio repeater centers. This has been done at 9,000 centers, and as a result, the attending personnel has been reduced by about 11,000 persons while the operating time of the radio centers has increased at the same time up 17 to 18 hours per day. It is planned that yet another 2,500 radio centers will be automated during 1981-1985.

To Improve the Work of the Postal Service

The postal service is one of the most massive forms of communications. It includes more than 85,000 enterprises. Their collectives are called upon to better and more completely satisfy the needs of the residents of cities and rural areas. One of the conditions for this is the mechanization and automation of the production processes as well as increasing the volume of containerized shipments of postal materials and printed products. The volume of such shipments will increase by a factor of 2.4 times. The material and technical base is being strengthened in the 11th Five-Year Plan. It is planned that 51 central postal enterprises near railroad services will be placed in operation.

Some 45 automatic letter sorting machines will be installed at large enterprises as well as 90 automated complexes for sorting, facing and canceling correspondence and about 100 mechanized complexes for sorting parcels and packages from the periodical press. The introduction of "Omega" system machines will be completed for transfer and other postal service cash handling operations. For the purposes of better serving the populace in rural areas, it is planned that about 750 mobile communications departments will be organized. It is planned that a transition will be made to motorized delivery of printed and postal materials during the five-year plan for more than 74,000 sections in rural areas.

The implementation of these measures in conjunction with decentralized printing, will make it possible by the end of 1985 to provide delivery of 90 percent of the copies of Pravda to subscribers as well as a number of other central newspapers the day they come out in print.

The plan for 1981 calls for increasing the length of telephone channels on long distance lines by more than 10 percent. The yearly plan calls for designing and placing in operation new and rebuilt facsimile newspaper transmission links from Moscow to 5 cities as well as 16 new television stations, 20 stations of the "Moskva" satellite television system, hundreds of "Ekran" type receivers and a large number of low power repeaters. Yet ahead is the comprehensive mechanization of 17 postal service junction center enterprises, and the overall number of them will brought up to about 300 by the end of the year.

On the whole, the assignments for the eight months in the communications sector have been fulfilled with respect to all major indicators: the volume of product output, the placement of new production facilities in service and the growth in labor productivity. Communications workers at the Sverdlovsk [illegible] telephone exchange, the Kiev post office and others achieved good results in socialist competition. The staffs of communications workers in the Kaliningradskaya and Kostromskaya oblasts and the Leningrad telephone exchange have come forward with a good initiative: obtain the entire rise in production for 1981 without increasing the staff.

At the same time, not all of the communication ministries of the union republics or the kray and oblast production engineering administrations are fully utilizing reserves for increasing efficiency and quality.

The quality of service to the populace is in need of improvement. The number of complaints about the work of communications organs, especially the post office, has not as yet been reduced. Losses of materials sent through the mail, their destruction and damage as well as the untimely delivery of telegrams, [illegible] and printed correspondence and printed materials are still allowed.

The workers in the sector are confronted with doing a great deal [illegible] to further improve, develop and refine postal and electrical communications [illegible].

8225
CSO: 5500/1001

INTERNATIONAL ULTRASOUND EXPOSITION IN LATVIA

[Vilnius SOVETSKAYA LITVA in Russian 17 Oct 81 p 4

[Text] As has been reported, the "Ul'trazvuk-81" international exposition opened last Tuesday at the Vilnius Exhibition Palace. It was noted at the press conference held for press, radio and television representatives that it was not by chance that the capital of Latvia was chosen as the place for holding this representative and interesting event.

The applications and branch laboratories of Kaunas Polytechnical Institute imeni Antanas Snechkus and the Vilnius State University imeni V. Kapsukas are solving ultrasonic measurement technology and quantum acoustics problems and are actively introducing the new ultrasonic technology they have created in industry and medicine. Scientists in the Republic are maintaining scientific ties with research centers in the USSR union republics as well as other countries.

This explains the fact that the Ministry of Higher and Middle Special Education of the Latvian SSR and the Trade-Industry Board of the Republic were among the organizers of the exposition.

Let's take a short walk through the halls of the decked-out Palace of Expositions. Representatives of 25 foreign companies are presenting exhibits here. The more than 200 different ultrasonic devices manufactured in Germany, Bulgaria, Belgium, Great Britain, France, Austria, Japan, Holland, Sweden and other countries evidence the fact that ultrasound is occupying increasingly strong positions in medicine, is being used widely in science, makes it possible to accelerate a number of technological processes, to obtain needed information about the internal structure of matter, physical-chemical properties of solid bodies, liquids and gases. In truth, ultrasonic waves have a huge set of widely varying professions.

We are standing in front of the exhibits prepared by the "Intermed" organization (GDR). These instruments are used for both therapeutic and diagnostic purposes. One of the devices exhibited by the German manufacturers -- a biomonitor -- can be used successfully to monitor blood pressure and automatically record the condition of a patient.

There is a whole group of instruments which let us "look" inside -- to obtain a picture of internal human organs. Visual information facilities make it possible to track the progress of various pathological processes. Medical representatives will likely be interested by the ultrasonic equipment models presented by the General Equipment Medical company (Belgium), by Satra (Great Britain), by TsZhR (France), by Piker (Austria), by Siemens (FRG), by Medata AB (Sweden), and the Aloka Company (Japan).

In conclusion, here are some short interviews with organizers and participants in the exposition:

Professor V. Bumarkas -- President of the Scientific Technical Center of the exposition and prorector of the Kaunas Polytechnical Institute (Vacl Antanas Snechkus):

--In our opinion, the exposition which has opened in the halls of the Palace should interest primarily a large contingent of specialists working in the area of application of ultrasonic waves. In this connection, acquaintance with the numerous exhibits of foreign firms will undoubtedly be useful for them. There is a great deal to be gained from studying the installations, observing the operation of equipment and devices, and finally from direct conversation. We hope that the exposition will also serve to create favorable conditions for contacts on a commercial basis, and on the basis of mutually profitable cooperation between the representatives of scientific and production organizations and the creators of the devices. We have also planned to hold a seminar and several symposia.

A. Moybrink -- President of the Nachrichtenelektronik Integrated Company (GDR):

--We have only brought a few of the devices which we produce to Vilnius. We produce a total of over 50 instruments, but not all of them are interesting. We brought some of them in order for our Soviet friends to have a more complete understanding of the list of items we produce. We are pleased by the attention the visitors are giving our exhibits. I would also like to say that we are most impressed with ancient Vilnius, and have been touched by the cordiality and hospitality of its residents.

A. Dikic -- President of the Elektroimpex Company (Bulgaria):

--At our booth, Vilnius residents and guests of the city can obtain extensive information on the technical advantages of Bulgarian ultrasonic devices. [illegible] includes primarily equipment for active interaction with processes occurring in liquid media. In addition, we are demonstrating equipment for ultrasonic welding of various types of plastics. The devices which we produce are widely used in electronics, radio technology, machine building and other branches of the economy. The "Vilnyus-II" exposition has also allowed us to become acquainted with many interesting exhibits. I would like to express a kind word to the organizers of this event.

USSR

INTERNATIONAL SVYAZ'-81 COMMUNICATIONS EQUIPMENT EXHIBITION IN MOSCOW

Moscow VECHERNYAYA GAZETA in Russian No 37, Sep 81 p 24

[Article by M. Mukhin: "International Exhibition in Moscow. 'Communications-81'"]

[Text] The international exhibition of communications systems and equipment, "Svyaz'-81", is being held from the 2nd to the 16th of September in Moscow's "Sokol'niki" park under the slogan "Communications Gear in the Service of Man and Society". More than 400 foreign organizations and firms are participating in it.

So Great Distances are Shortened

More than 3,000 exhibits are presented in the Soviet section. From space satellites and the latest electronic devices to radio amateur equipment made by the amateurs themselves and postage stamps: such is the wide range of the exhibition.

Some 220 Soviet enterprises and scientific research institutes familiarize the visitor with the formation of the overall state Unified Automated Communication System (YeAASS). There is nothing on its scale in the world. The system of satellite communications within the nation is also unique. Ground station equipment and models of the "Molniya-3", "Ekran" and "Gorizont" satellites were shown at the exhibition. Because of them, information is transmitted to the most remote point in the nation in an operationally timely manner, as well as issues of central newspapers and television and radio programs. The new television center constructed for the 1980 Olympics and now operating around the clock makes it possible to view central television programs at a time convenient for the residence of various areas. The "Ekran" equipment complex for receiving satellite television transmissions, which is designed for a small settlement, is compact and comparatively inexpensive (19,300 rubles in all).

A special stand was set aside for showing our nation's participation in the international "Kospas-Sarsat" project. The USSR, along with Canada, the U.S. and France is solving the problem of detecting ships and aircraft in distress and determining their coordinates by means of radio buoys and low altitude satellites. Work on the organization of the international maritime satellite communications system "Inmarsat" was also shown.

And there was an altogether earthbound exhibition: an automated technical operations center for a municipal telephone exchange of 300,000 to 500,000 numbers.

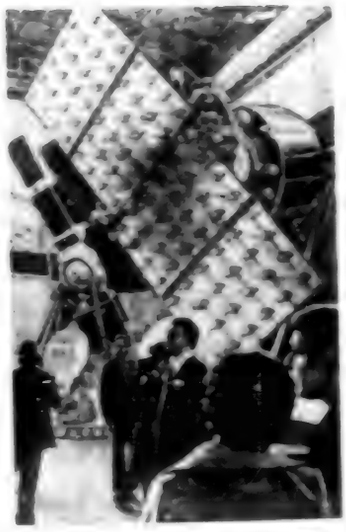

Figure 1. In the photo: space communications facilities in the Soviet section of the exhibit.

Figure 2. Such dispatcher communications consoles for agriculture have already been delivered to the USSR from Bulgaria.

Figure 3. Hungarian long range communication post.

Figure 4. Automatic telephone answering unit for information services in the Polish People's Republic exhibition.

The multiple-control console system for generating data using microcomputers, the SM-1800, will become a reliable assistant for economists and communications engineers. The outlays for its introduction will be recovered in less than half a year. Because of what? The time for processing economic data will be curtailed by a factor of more than 10 times, while 25 times less time is required for programming specific problems.

The post office is also adjusting to the pace of the space era. A sorting line with a system for zip code recognition on envelopes was demonstrated at the exhibition. Its speed is 20,000 letters per hour.

Communications gear made by Soviet enterprises has deserved authority in the world market. Telephone, telegraph and electrical-acoustical equipment as well as

radio and television equipment are being exported - more than 3,000 product designations in all.

Figure 6. A telephone exchange with a fiber optics system was shown in operation in the stand of the Finnish "Nokia" company.

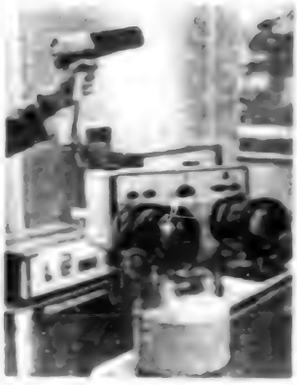

Figure 8. It is easy to determine the location of a heat leak from a building or a pipeline using the infrared devices of the Swedish "AGA" company.

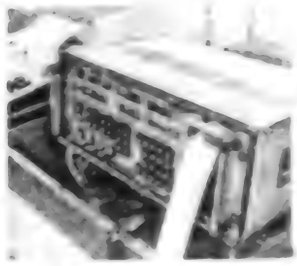

Figure 7. A multifrequency signaling unit for checking tone code transmitters and receivers is demonstrated by the Danish "Elmi" company.

Figure 9. New telephone exchange equipment in the CDR exhibition.

Figure 9. Various control consoles are shown in operation in the Czechoslovakian stand.

[illegible], at which 30 papers of Soviet and foreign specialists will be heard. This large international show will undoubtedly serve to strengthen the existing and establish new mutually advantageous contacts among business groups from various nations.

6215
CSO: 1820/1302

NEW TV TOWER FOR SOUTH KAZAKHSTAN

Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian 4 Oct 81 p 1

[Text] Construction is now completed on the Alma-Ata television tower, the highest structure in the earthquake zone of the country. The white and orange needle of the tower reaches the planned 372-meter mark; together with the Kok-tyube mountain on which it is built, the steel spire reaches a height of over a kilometer. This unique structure has been completed 6 months ahead of schedule. The installation crew from the "Kazstal' montazh" trust, headed by Yuriy Leonidovich Nosarev, honored builder of the Kazakh SSR and holder of the Order of Lenin and Labor Red Banner, distinguished itself here: this crew has participated in the construction of many high structures throughout Kazakhstan. Along with other builders, this crew is now dismantling the temporary machinery and devices and finishing off the interior of the gigantic shaft of the tower. The introduction of this TV tower will double the reliable reception of television transmissions in south Kazakhstan.

The Alma-Ata television tower.

6980
CSO: 1800/1004

[illegible] NORDSAT, FEARS HARM TO LOCAL TV

Copenhagen BERLINGSKE TIDENDE in Danish 2 Nov 81 p 5

[Article by Merete Bjørn Hansen]

[Text] The Nordic Council of Ministers will decide this month whether or not to start the costly Nordic satellite project, NORDSAT. Today, the report on the initial results of the work of the Danish Media Commission will appear, the "Report on NORDSAT." This report is an important contribution in the efforts to determine the Danish position on the project.

The Media Commission, which was set up by the prime minister's office in the spring of 1980, is, with its 60 members, the hitherto largest Danish commission. Its task is, in 3 years, at a cost of more than 1 million kroner annually, to "provide the basis for the formulation of a joint public media policy."

It is already known from the final meeting in the summer of the commission on the report that a majority of 34 of the commission's 60 members cannot recommend Danish participation in the NORDSAT project. The report now published previews the hitherto most comprehensible presentation of this large Nordic project, as well as the arguments for an eventual Danish participation in it.

The majority, comprising, among others, the chairman of the commission, Professor H. P. Clausen, the chairman of the Radio Council, Thrta Nielsen, Jørgen Klenow, deputy chairman, and the director-general of the Danish Broadcasting Corporation, L. Lindsley, the deputy chairman of the National Federation of Local Authorities, Erling Tiedemann, H. Ølund, deputy mayor, and the chairman of the Danish Library Association, Mayor Carl Johan Mortensen, opposed the project, primarily because it will exclude the possibility of a regional expansion of Danish TV. The arguments against the project are the following:

The total Nordic costs, calculated in terms of 1979 prices, are estimated to be at least 5 billion kroner over a 20-year-period, but the estimate is not considered tenable. The Nordic joint co-operation will not be strengthened in a way that is commensurate with the costs--irrespective of the uncertainty

as to their magnitude. If the realization of a Danish TV-2 project is tied to NORDSAT, regional development will be excluded. The costs of programs for a Danish TV-2 will be the same via the satellite as via a ground network like the one now used by TV. NORDSAT requires coordination of the programs, which will have unacceptable consequences to the independence of the individual broadcasting systems. The satellite system--as to be feared--is technically vulnerable.

Twelve members of the commission--all of them government officials--support NORDSAT with Danish participation, provided the negotiations will have satisfactory results and the necessary economic resources will be available. The twelve government officials are among the group of a total of 24 members of the commission who, for various, largely Nordic cultural policy,reasons, support the project, but within this group as well there are four members who have expressed their doubts regarding the economic aspects.

[illegible]
CSD: 1600/2044

FREE MARKET IN PHONE-EQUIPMENT SALES TO START IN 1982

Copenhagen BERLINGSKE TIDENDE in Danish 11 Nov 81 pt II p 3

[Article by Finn Knudstrup]

[Text] As of the New Year, the telephone companies will no longer have a monopoly on telephone equipment. At that time, the market will become free, and that means that extremely ingenious microprocessor equipment will be marketed which will put the old grey telephone in the doghouse as a relic of the past. BERLINGSKE TIDENDE has looked into the fair new world of telephones which will await us. A world in which our telephones may become our secretaries but also a world involving the risk of even more stress in the working-day.

The term "Port-a-touch" is just one of the many names in the new telephone era. A "Port-a-touch" is a battery-operated telephone of the shape and size of a pocket-size calculator. It renders telephone directories almost superfluous as the instrument will memorize up to 80 coded numbers--and will even call the numbers itself!

The procedure: A business man with the need to be able to call up to 80 specific numbers, carries his "Port-a-touch" in his briefcase. If he/she is attending a meeting in town and wishes to contact the main office in London, he/she lifts the receiver nearest by, pushes the code "L 1" on the buttons of his/her "Port-a-touch." The small piece of equipment then fires off a cascade of audio impulses--and the number has been called. This telephone is expected to be marketed in 1982 at an approximate cost of 1,300 kroner by the firm of Peter N. Holm, Christiansbavn.

36-Year-Old President

Peter N. Holm himself, the merely 36-year-old president (he refers to himself as "president") is a former pilot and has on his trips around the world encountered supplementary equipment for telephones, the contracts for which he has secured through his import/export company. He is ready for the market to become free as of the New Year, with a series of receivers and a company with a staff of 35 people, with offices not only in this country but also in Sweden and the United States. His annual turnover has already reached nearly 8 million

[illegible], and the president of the company, who drives a Jaguar, does not conceal the fact that there is a lot of money to be made in this fair new world.

[illegible] has great hopes from another piece of equipment as well which will become [illegible] as of the New Year, a so-called call-diverter. This is a box which may be connected with any telephone, and which may be programmed to switch calls to another telephone number without the slightest click. The call-diverter thus makes it possible to close, for example, a branch office during a particular week-end or during a vacation period. When the number is called, the call will be switched, without a sound, to the one who is on duty. The system may be expanded in such a way that the switch is programmed from the outside via the telephone.

Attorney in Sweden

Another example: The attorney who would like to spend a sunny working-day in his beach cottage has a call diverter take care of the office. Clients calling the office have no idea that the dignified attorney actually is taking his calls on the terrace of his beach cottage.

This piece of equipment, however, incorporates a safety measure. The person placing the call will, at the most, have to pay for a call to the telephone number selected. Even if we had our attorney receive his calls at a hotel at Cannes, his clients would thus not be billed for a call to that place.

Without the device for programming the switch from the outside, the call-diverter will cost 4,500 kronor--and with that device, twice as much per telephone.

Unveiler for Lestrygon

[illegible] has got still other exciting things in his small show-room at Ohlsta[illegible] the telephone that will do everything--even render a secretary superfluous. The receiver has a built-in key-board and the accompanying has a telephone-answering machine. A small, pocket-size, ultrasonic transmitter enables the owner of the equipment to call his telephone-answering machine from all over the world and have messages replayed and, if he so desires, to dictate new ones. An electronic voice records the time of each message received, stating date and hour.

This piece of equipment has got one small drawback, however, viz. that there are only ten different transmitters to be had. If an enterprise intends to undertake espionage for purposes of competition, it may thus purchase all of the ten transmitters--and it will, thereby, have the possibility of listening in on all the telephone-answering machines of the entire world and even dictate false messages--for example, that the firm does not regret to tell the customer that it has been closed on account of bankruptcy and that it refers the customer to the former competitor.

Faced with that possibility, Peter W. Hole assures us that they will have [illegible] different codes by the New Year, when it will be a costly affair [illegible] to the telephone-answering machines of other people.

Prohibited Equipment

The firm at Christiansbavn also offers a mini-telephone where a flap gives access to a key-board. The firm has also got wireless telephones which one can take along into the yard, seeing that the main telephone has got a transmitter to the telephone in the yard.

However, all of these novel devices have one thing in common, viz. that they are prohibited. It is true that the Danish telephone companies have accepted that the monopoly on equipment be lifted--but they do not want to give away the telephones themselves. Not yet. At best, alternative telephones alone may be purchased through the telephone companies, whereas the equipment as of the New Year may be purchased anywhere as long as it has been approved by the authorities.

"We Do not Sell Unemployment"

Peter W. Holm: "In my opinion, they ought to permit the sale of everything. For we know that people who are travelling will, nevertheless, buy telephones abroad to take home with them. One has got a free choice as shown by SAS at Frankfurt Airport. The remainder of the monopoly has got to be lifted--for people still buy what they fall for."

Peter W. Holm is not only an importer of a number of foreign articles in the area of telephone equipment. He actually exports more than he imports: the call-diverter, for example, is being made in cooperation with Danish electronics companies and is exported especially to the United States. Peter W. Holm has even started selling the new pushbutton telephone of the Copenhagen Telephone Company in the United States. It is popular in that country on account of its design. He also sells fully automatic taxa exchanges where the customer calls a telephone answering machine and requests a taxa. The telephone answering machine, subsequently, repeats the request on the taxa telephone.

The result is, of course, that it is technically possible to put telephone operators out of work, just as a number of the other devices marketed by "the president" substitute a threat to the traditional work of secretaries. To this, the president says:

"Those who are employed will get still more to do and will, therefore, benefit by the fair, new world. But I do not believe that we are selling unemployment. Many office workers actually waste their time on tasks which may equally well be handled by computer technology--so that the office worker in question may perform more meaningful work than, for example, consulting a telephone directory."

9262
CSO: 3600/204

BRIEFS

GROUND STATIONS FROM JAPAN--It was the Japanese who carried away the order for 17 million kroner for two satellite ground stations for the Postal and Telegraph Services. They will be used for telephone communication between Denmark and the offshore drilling platforms in the North Sea and between Denmark and Greenland. The contract was concluded with the Danish agent, JAI, the engineering firm of Jørgen Andersen, Glostrup, and the reason why the Japanese got the large order is the vast knowledge which the supplier, Nippon Electric Co., has in the area, as well as the confidence associated with the fact that they have already supplied similar stations to Greenland and the rest of the world, even to the home of technology, the United States. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 30 Oct 81 p 3] 7262

CSO: 4500/2044

BRIEFS

NEW MOBILE PHONE EXCHANGE--Work on the automatic Nordic Mobile Telephone System (NMT) is proceeding according to plan in Finland. Testing of the automobile telephone exchange in Lahtis will occur in November. The NMT network will be open for experimental use in December. About [illegible] telephone users will participate in the experiment. In addition to the Post Office and the Telecommunications Administration, several state service departments and various telephone manufacturers will be involved. Actual service will start at the beginning of March. Construction on the network of base stations required by the NMT system is in full swing and in early March about 20 base stations will be operating south of the line connecting Bjorneborg, Tammerfors, Lahtis, Kouvola, and Fredrikshamn. By 1984 the network will stretch as far up as Rovaniemi. The NMT system has been developed through the cooperation of the telecommunications administrations in Finland, Norway, Sweden, and Denmark. As a result of this cooperation, an automobile telephone system has been developed that is among the most advanced in the world. The Nordic countries are divided into a number of service regions for the NMT system. Each region has a network of base stations. When a mobile telephone leaves one service region and enters a new region, this is reported automatically to the user's "home" exchange. In this way, the exchanges will know where the mobile telephone is, even if it enters another Nordic country. In this way, calls to vehicles can be connected automatically regardless of where the customer happens to be. The NMT system began operating in Sweden at the beginning of this month, Norway will begin in early November, and Denmark at the beginning of next year. Each year the network's coverage will be improved and by 1990 it will cover practically all of the Nordic countries. In addition, the NMT network is offering special services such as, for example, automatic transfer of incoming calls to another number, call requests, restrictions on outgoing calls, etc. The NMT network will also make it possible to have telephone booths, buses, and ferries. [Text] [Helsinki HUFVUDSTADSBLADET in Swedish 24 Oct 84] p [illegible] 9336

CSO:5500/2038

RADIO-MONT-BLANC START, BACKGROUND DESCRIBED

Paris LE MONDE in French 18 Nov 81 p 19

[Article by Isabelle Vichniac]

[Text] At midnight on Sunday, 8 November, a new peripheral radio station, Radio-Mont-Blanc, began to broadcast from Italy to France. An initial experiment in monophony with a provisional wave length of 101.5 Mhz, Radio-Mont-Blanc should broadcast 24 hours a day in stereophonic sound beginning on Tuesday, 10 November.

Started by Gerard Stoffel nearly 6 years ago, this private radio station, which has rather considerably backing (LE MONDE, 21 and 24 January) previously aimed its programs only at the Val d'Aosta, an autonomous region of Italy.

Headed by Roland Dhordain, who has a background in radio and television (assistant director of radio broadcasting in 1964, he was named director of radio broadcasting in 1968, then director of the first television network in 1971), the station, whose transmitter is particularly powerful, plans to cover an area as far as Lyon and even Valencia.

Radio-Mont-Blanc has the highest transmitter in the world (at 3,930 meters on the Italian slope of Mont-Blanc, at Tre-la-Tete). Construction of the antenna took 3 years and required 800 helicopter flights. Because of the cold and ice, guides and construction workers were able to work only a total of 180 days. The transmitter's power will come from three generators supplied with kerosene, 18,000 liters of which have been stored at Tre-la-Tete, a 5-month supply. The antenna is protected from the wind (gusts may reach 280 kilometers per hour) by a kind of hollow tower 10 meters high. However, the station's operation is by remote control from the Val d'Aosta because at that altitude, human presence is possible only 90 days a year.

Radio-Mont-Blanc wants to be independent, international (or more precisely, multiregional) and essentially French-speaking. Its main objectives are to ensure, within an area of cover divided by borders which many deem to be artificial, the continuation of the French language and to respond to the informative needs of regional listeners who, to cite but one example, do not care very much about the signs along the French highways but who are very interested in meteorological conditions on both sides of the Alps.

According to its director, Roland Chordain, "Radio-Mont-Blanc should be a radio of communication and contact, a radio of dialogue, giving priority to technical services and renewed gaiety. Music will occupy 80 percent of all programming; information and services 20 percent." It will be "a neighborly, closeby radio station," aiming to get away from any "Parisianism" and trying to get men to communicate.

Radio-Mont-Blanc has existed as a private station in the Val d'Aosta since 1976, thanks to the efforts of Gerard Stoffel, former promoter and entrepreneur of entertainment, and a Val d'Aosta native, Mario Stevenin, for whom the top priority has always been the defense of the French language and culture. Like many Val d'Aosta residents, he has never forgotten that Italian was the language of fascism.

Five Minutes of Advertising

In 1979, the station acquired a new transmitter in order to better cover its area and built a broader financial base thanks to the participation of two officials of the group LE MESSAGER (published in Thonon): Bernard and Laurent Mussu. The head of the Geneva daily LA SUISSE, Jean-Claude Nicole, then came on the scene. All three promoters succeeded in putting together the financing (some 15 million francs) needed for the new format of Radio-Mont-Blanc. It has five minutes of advertising per hour, which must respect the "moral and political restrictions" imposed in France and Switzerland in the audiovisual field. This advertising will involve only products available in both countries.

Radio-Mont-Blanc is governed by Italian law. As far as France and Switzerland are concerned, there is a legal vacuum for the time being. The promoters hope to enjoy the de facto status of certain peripheral stations, as Europe 1 has for 20 years. In fact, the International Telecommunications Union, whose headquarters are in Geneva, has not assigned it any frequency.

Whatever the case, station officials, who are careful not to interfere with the broadcasts of pirate stations, do not seem to have the slightest fear of any jamming.

11,466
CSO: 5000/0168

[illegible] PLANS, FUTURE ACTIVITIES OF RADIO TELE-LUXEMBOURG

[illegible] in German 29 Nov 81 p 43

[Article by W.H.: "Radio Luxembourg, a Device with a Satellite Dish"]

[Text] Radio Luxembourg is putting fear into its West European broadcasting colleagues with its high-flying plans: The first one to put a direct satellite in operation 36,000 km above the equator at the position of 19°west will in the long run skim the cream off the top of the advertising business. And the managers of the Compagnie Luxembourgeoise de Telediffusion (CLT) have made up their minds to be the first. It has always been the business policy at the Louvigny Villa to be the leader of the pack and to profit handsomely from having the inside track. As early as 1929 the CLT's predecessor, the CLR, secured from the Luxembourg government exclusive usufructuary rights to all future radio services on all channels allocated internationally for this purpose. The Grand Duchy receives a complete program in exchange and enjoys a healthy share of profit from the transmissions and receipts that spill over its borders: Radio Tele-Luxembourg (RTL) is the largest taxpayer in the country. Moreover, it pays license fees and also puts money into the coffers from commercials activities on the side. The company has been empowered "to initiate and pursue any activity which resembles the exploitation of radio and television broadcasts or is connected in any way with said exploitation."

The Domain of the Radio Dynasty

Via its transmitters -- in Beidweiler, Marnach, Junglinster, Hosingen and Heidolsheim -- the RTL provider half of Europe with a vast number of radio programs in the low, medium, high and very high frequency ranges. The domestic program is broadcast on VHF channels in the Luxembourg dialect -- 3,400 program hours every year. The Dutch program is limited to 30 minutes a day -- from 7:00 to 7:30 -- and despite competition from television broadcasts, the MF broadcasts have a safe market share in the Flemish part of Belgium and in The Netherlands.

The French LF-radio program has been a hit for decades. The CLT has managed to win the loyalty of around 5 million listeners -- by its own count. In a tough market struggle for the audience's favor, the CLT is fighting with (and against) rivals for the larger share of the advertising budgets. At the end of 1980 and the beginning of 1981, Europe 1 was leading by a nose, but RTL is [illegible] having already made up for the lost ground.

NEWLY-AUTOMATED MOBILE PHONE SYSTEM PUT INTO OPERATION

Oslo AFTENPOSTEN in Norwegian 11 Nov 81 p 44

[Article by Toril Nordeng]

[Text] At 1219 hours on Tuesday Kjell Holler, general director of the Telecommunications Board, was able to start using the new automatic mobile telephone system in Norway. To begin with the automatic mobile phone system will make it possible for subscribers in the eastern part of the country to make direct calls to over 60 countries around the world. Sometime in 1985 the system will cover the entire country. Holler's first conversation over the automated mobile telephone went to the NRK [Norwegian State Radio] correspondent in Rome, Jens Solvik. The connection was very good.

The manual mobile telephone service in Norway was introduced 12 years ago. Today Norway has more mobile telephones than any other country in Europe, a total of about 31,000. "With our automatic system we will also be a nation with one of the most modern systems," said Holler at a press conference in Oslo yesterday.

With the Ostland region the first to be hooked up with the Telecommunication Board's new system talks will be handled via roughly 70 base stations from Dovre in the north to Kragero in the south. When the entire country is plugged into the system four computerized mobile telephone centrals over the entire country will handle connections between base stations. The Oslo central will cover eastern Norway.

In contrast to the manual mobile telephone system the new Nordic mobile telephone system (NMT) will spare users from the lines that can occur at manual centrals. Separate microphones and loudspeakers make the mobile telephone simple and flexible to use. It will give more protection against people listening in, better sound quality and the automated central will automatically keep track of where the apparatus is located. It will no longer be necessary to report where one is. The system is also designed to provide special services such as automatic telephone answering and various types of holding.

The new kind of mobile telephone will cost between 20,000 and 25,000 kroner per apparatus. The Telecommunications Board estimates that 40,000 automatic mobile

telephones will be sold in Norway by 1985. It is estimated that there are 2000 apparatuses in operation through 1981. The Telecommunications Board has given preliminary approval to three models and at the opening on Tuesday concessions were granted to 140 apparatuses.

The NMT system will be cheaper for consumers to use than the old manual system. Conversation rates will be reduced due to reduced operating expenses with metered rates. One metro trip lasting 12 seconds will cost 0.75 kroner. With the manual mobile telephone the rate today is 3.50 kroner per minute.

The development of the new automatic mobile telephone system in Norway is the result of close cooperation on development by the Nordic telecommunications agencies. In the first expansion stage the Telecommunications Board invested around 75 million kroner, with 70 million kroner going to the central exchange in Oslo and 5 million to the base stations and lines. The figure corresponds to 1 percent of total investments by the Telecommunications Board in that period.

Press consultant Ivar Sliper of the Telecommunications Board stressed that the introduction of automatic mobile telephone service in Norway will not lead to job losses. The expansion will occur in stages and the Telecommunications Board estimates the manual stations will be maintained through this decade. "After that it will be natural to have the personnel from the manual stations transfer to other activities within the telecommunications system," said Sliper.

In the beginning the Telecommunications Board will have the capacity to handle conversations for 2500 subscribers in the Ostland region. Kjell Holler would not guarantee that there would be no waiting time to get hooked up to the new system. But he stressed that large safety margins have been included in the user forecasts and he thought the Telecommunications Board had embarked on a realistic expansion tempo. In all the Telecommunications Board has 180 channels at its disposal for the entire country.

Code

FIRST LOCAL-RADIO STATION BEGINS TEST BROADCASTING

Oslo AFTENPOSTEN in Norwegian 16 Nov 81 p 14

[Article by Terje Avner]

[Text] Risor, 15 Nov--Introduced with the strains of the "Typewriter Symphony" the historic first local radio for the towns of Risor and Gjerstad went on the air Saturday. And such broadcasts can become the norm both in Risor and in other towns across the country within a short time if the political authorities give the green light. It was the Sorland transmission that gave AUST AGDER BLAD a chance with a 5-minute interval in its broadcasting Saturday.

AUST AGDER BLAD was the first local newspaper to request permission from the Cultural Affairs Ministry to operate a local radio. Perhaps somewhat surprisingly for a Labor Party paper.

"Well, let's make it clear that in principle we don't see it as our goal to destroy the NRK [Norwegian State Radio] monopoly altogether. But if the authorities plan such a development it is important not to get left behind," editor Oddvar Mykland of AUST AGDER BLAD told AFTENPOSTEN.

AUST AGDER BLAD--the printed version--falls through the mailboxes of 15[illegible] subscribers each Tuesday, Thursday and Saturday. Perhaps a local radio produced by the newspaper staff would go on the air Monday, Wednesday and Friday...

Two men on the AUST AGDER BLAD staff, Steinar Johnsen and Rolf Pihlstrom, went to the Sorland transmission studio in Kristiansand on Friday to tape their contribution to local radio. They had chosen to stick to the quite local level. These were some of the news items:

"Employees of the towns of Risor and Gjerstad who took part in the municipal employees' strike will have their wages docked."

"An exciting election for chairman is shaping up in Risor."

"Risor Savings Bank is moving toward the planned merger in Setesdal."

"But a local radio is not just news," said the people behind the historic broadcast Saturday. Announcements of events and gatherings should be included too.

For example: "Members of the Risør Soccer Club will be doing volunteer work on Saturday."

"The health team invites you to a social evening at the Gjerstad Home."

"Retired Iron and Metal Union workers will meet Sunday at the Cinderella."

And so if that were not local enough:

"A wedding will be celebrated Sunday between...."

Congratulations flowed in to the editorial staff in Risør after the broadcast on Saturday. That was proof enough for the newspaper staff that local radio would be popular.

"This gave us a first taste even though we were nervous about our microphone debut. And it didn't make things easier to have the cameras for NRK's 'Review of the Day' pointing their lenses at us," said journalists Steinar Johnsen and Knut Pihlstrøm.

"It is important for an autonomous newspaper like AUST AGDER BLAD to take part in the media development that is happening in local society. That is why we were quick to make our local radio application. Having only commercial market interests behind such radio broadcasting would quickly create problems for small newspapers," said editor Oddvar Mykland.

END

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Dec. 21, 1981